

Amendments to the Claims:

Please amend the claims as indicated.

1. (Currently Amended) A sequence management apparatus for backing up data across a plurality of clients, the apparatus comprising:

a client request module configured to receive data to be backed up from a source client;

a sequence module configured to generate a non-transparent sequence of a plurality of target clients, wherein the non-transparent sequence comprises an order that a plurality of backup data packets are stored on the plurality of target clients and the non-transparent sequence is unique and exclusively accessible to a global sequence manager; and

a packet storage module configured to store the data on the plurality of target clients according to the non-transparent sequence, wherein the source client and the plurality of target clients are organized in a grid computing system, with ~~client usage fees determined by a subscription manager and~~ wherein each physical distance between each target client is not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter, the minimum distance packet proximity parameter and maximum distance packet proximity parameter each specifying a distance value measured in a unit selected from miles and kilometers;

a packet retrieval module configured to retrieve the plurality of backup data packets backed up on the plurality of target clients; and

a data assembly module configured to assemble the retrieved plurality of backup data packets in the non-transparent sequence.

2. (Previously Presented) The apparatus of claim 1, wherein the global profile management module is configured to manage a metadata file, the metadata file descriptive of the data backed up on the plurality of target clients.

3. (Previously Presented) The apparatus of claim 2, wherein the metadata file is selected from the group consisting of a global client profile, a source client profile, a source data record, a target data record, a data assembly record, and a global backup log.

4. (Previously Presented) The apparatus of claim 2, wherein the global profile management module is further configured to use a unique data identifier corresponding to the data to map the data to the source client, the unique data identifier identifying original, non-backup data and indicating a uniqueness of the data as compared to other data.

5. (Original) The apparatus of claim 4, wherein the global profile management module is further configured to map the unique data identifier to a second source client on which an identical copy of the data is stored.

6. (Canceled)

7. (Currently Amended) The apparatus of claim 6, wherein the packet retrieval module is further configured to retrieve the at least a portion of the data backed up on one of the plurality of the target clients according to the non-transparent sequence generated by the sequence module.

8. (Canceled)

9. (Previously Presented) The apparatus of claim 1, wherein the packet storage module is further configured to separate the data into the plurality of backup data packets and to store the backup data packets on the plurality of target clients.

10. (Previously Presented) The apparatus of claim 9, further comprising a compression module configured to compress the data within the backup data packets prior to storing the backup data packets on the plurality of target clients.

11. (Previously Presented) The apparatus of claim 9, further comprising an encryption module configured to encrypt the data within the backup data packets prior to storing the backup data packets on the plurality of target clients.

12. (Previously Presented) The apparatus of claim 9, further comprising a redundancy module configured to create a redundant backup data packet of at least one of the backup data packets prior to storing the backup data packets on the plurality of target clients.

13. (Previously Presented) The apparatus of claim 12, wherein the packet storage module is further configured to store the redundant backup data packet on one of the plurality of target clients according to the non-transparent sequence.

14. (Canceled)

15. (Canceled)

16. (Currently Amended) A client for backing up data across a plurality of clients in conjunction with a sequence management apparatus, the client comprising:

a network interface configured to communicate with the sequence management apparatus;

a storage configured to define an allocated storage; and

a client backup manager apparatus configured to manage a backup operation across a grid computing system using a unique data identifier and a non-transparent sequence, wherein the non-transparent sequence comprises an order

that a plurality of backup data packets are stored on the plurality of clients and the non-transparent sequence is unique and exclusively accessible to a global sequence manager and the unique data identifier identifies original, non-backup data, wherein the plurality of clients are organized in the grid computing system, wherein with client usage fees determined by a subscription manager and each physical distance between each client is not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter, the minimum distance packet proximity parameter and maximum distance packet proximity parameter each specifying a distance value measured in a unit selected from miles and kilometers, the client backup manager further retrieving the plurality of backup data packets backed up on the plurality of clients and assembling the retrieved plurality of backup data packets in the non-transparent sequence.

17. (Previously Presented) The client of claim 16, wherein a first client is a source client configured to initiate the backup operation and generate the unique data identifier for the data.

18. (Previously Presented) The client of claim 16, wherein a first client is a target client configured to store at least a portion of the data in the allocated storage in response to a data storage request from the sequence management apparatus.

19. (Currently Amended) A system for backing up data across a plurality of clients, the system comprising:

- a network communications channel;
- a source client connected to the network communications channel and configured to initiate a data backup operation;

a plurality of target clients connected to the network communications channel and configured to store at least a portion of the data; and

a global sequence manager connected to the network communications channel and configured to store the data on the plurality of target clients according to a non-transparent sequence of the plurality of target clients, wherein the non-transparent sequence comprises an order that a plurality of backup data packets are stored on the plurality of target clients and the non-transparent sequence is unique and exclusively accessible to the global sequence manager and the source client and the plurality of target clients are organized in a grid computing system, ~~wherein with client usage fees determined by a subscription manager and each~~ physical distance between each target client is not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter, the minimum distance packet proximity parameter and maximum distance packet proximity parameter each specifying a distance value measured in a unit selected from miles and kilometers, the global sequence manager further retrieving the plurality of backup data packets backed up on the plurality of target clients and assembling the retrieved plurality of backup data packets in the non-transparent sequence.

20. (Previously Presented) The system of claim 19, wherein the global sequence manager is further configured to store a single copy of the data corresponding to a unique data identifier and to map the single copy of the data to the source client on which the data is stored and to a second source client on which an identical copy of the data is stored, the unique data identifier identifying original, non-backup data and indicating a uniqueness of the data as compared to other data.

21. (Canceled)

22. (Previously Presented) The system of claim 19, wherein the global sequence manager and subscription manager are further configured to track a source storage allocation parameter of the source client.

23. (Previously Presented) The system of claim 19, wherein the global sequence manager and subscription manager are further configured to track a target storage allocation parameter of each of the plurality of target clients.

24. (Previously Presented) The system of claim 19, wherein the global sequence manager and subscription manager are configured to track a resource allocation parameter.

25. (Original) The system of claim 24, wherein the resource allocation parameter is selected from the group consisting of a network allocation parameter, a client processor parameter, and a client bandwidth parameter.

26-29. (Canceled)

30. (Currently Amended) A method for backing up data across a plurality of clients, the method comprising:

receiving data to be backed up from a source client;

generating a non-transparent sequence of a plurality of target clients; and

storing the data on the plurality of target clients according to the non-transparent sequence, wherein the non-transparent sequence comprises an order that a plurality of backup data packets are stored on the plurality of target clients and the non-transparent sequence is unique and exclusively accessible to a global sequence manager and the source client and the plurality of target clients are organized in a grid computing system, wherein ~~with client usage fees determined by a subscription manager and each physical distance between each target client is~~

not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter, the minimum distance packet proximity parameter and maximum distance packet proximity parameter each specifying a distance value measured in a unit selected from miles and kilometers;

retrieving the plurality of backup data packets backed up on the plurality of target clients; and

assembling the retrieved plurality of backup data packets in the non-transparent sequence.

31. (Previously Presented) The method of claim 30, further comprising managing a metadata file descriptive of the data backed up on the plurality of target clients, the metadata file comprising one of a global client profile, a source client profile, a source data record, a target data record, a data assembly record, and a global backup log.

32. (Previously Presented) The method of claim 30, further comprising separating the data into the plurality of backup data packets and storing the backup data packets on the plurality of target clients.

33. (Previously Presented) The method of claim 30, further comprising using a unique data identifier corresponding to the data to map the data to the source client, the unique data identifier identifying original, non-backup data and indicating a uniqueness of the data as compared to other data.

34. (Canceled)

35. (Original) The method of claim 30, further comprising tracking a resource allocation parameter, wherein the resource allocation parameter is one of a source storage

allocation parameter, a target storage allocation parameter, a network allocation parameter, a client processor parameter, and a client bandwidth parameter.

36. (Currently Amended) A method for backing up data across a plurality of clients, the method comprising:

requesting data to be backed up from a source client;

receiving data to be backed up from a source client;

separating the data into a plurality of backup data packets;

generating a non-transparent sequence of a plurality of target clients, wherein the non-transparent sequence comprises an order that the plurality of backup data packets are stored on the plurality of target clients and the non-transparent sequence is unique and exclusively accessible to a global sequence manager;

storing the backup data packets on the plurality of target clients according to the non-transparent sequence, wherein the source client and the plurality of target clients are organized in a grid computing system, ~~wherein with client usage fees determined by a subscription manager and each physical distance between~~ each target client is not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter, the minimum distance packet proximity parameter and maximum distance packet proximity parameter each specifying a distance value measured in a unit selected from miles and kilometers;

using a unique data identifier corresponding to the data to map the data to the source client;

managing a metadata file descriptive of the data backed up on the plurality of target clients;

tracking a resource allocation parameter, wherein the resource allocation parameter is one of a source storage allocation parameter, a target storage

allocation parameter, a network allocation parameter, a client processor parameter, and a client bandwidth parameter; and

managing a contractual subscription of the source client and the plurality of target clients;-

retrieving the plurality of backup data packets backed up on the plurality of target clients; and

assembling the retrieved plurality of backup data packets in the non-transparent sequence.

37. (Currently Amended) A programmable hardware device storing executable code that is executed on a processor to carry out a method for backing up data across a plurality of clients, the method comprising:

receiving data to be backed up from a source client;

generating a non-transparent sequence of a plurality of target clients, wherein the non-transparent sequence comprises an order that a plurality of backup data packets are stored on the plurality of target clients and the non-transparent sequence is unique and exclusively accessible to a global sequence manager; and

storing the data on the plurality of target clients according to the non-transparent sequence, wherein the source client and the plurality of target clients are organized in a grid computing system, wherein with client usage fees determined by a subscription manager and each physical distance between each target client is not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter, the minimum distance packet proximity parameter and maximum distance packet proximity parameter each specifying a distance value measured in a unit selected from miles and kilometers;-

retrieving the plurality of backup data packets backed up on the plurality of target clients; and
assembling the retrieved plurality of backup data packets in the non-transparent sequence.

38. (Previously Presented) The programmable hardware device of claim 37, wherein the method further comprises managing a metadata file descriptive of the data backed up on the plurality of target clients, the metadata file comprising one of a global client profile, a source client profile, a source data record, a target data record, a data assembly record, and a global backup log.

39. (Previously Presented) The programmable hardware device of claim 37, wherein the method further comprises using a unique data identifier corresponding to the data to map the data to the source client, the unique data identifier identifying original, non-backup data and indicating a uniqueness of the data as compared to other data.

40. (Canceled)

41. (Canceled)

42. (Previously Presented) The programmable hardware device of claim 37, wherein the method further comprises separating the data into the plurality of backup data packets and to store the backup data packets on the plurality of target clients.

43. (Canceled)

44. (Previously Presented) The programmable hardware device of claim 37, wherein the method further comprises modifying the data prior to storing the data on the plurality of

target clients, wherein modifying the data comprises one of compressing, encrypting, and duplicating at least a portion of the data.

45. (Canceled)

46. (Currently Amended) An apparatus for backing up data across a plurality of clients, the apparatus comprising:

means for receiving data to be backed up from a source client;

means for generating a non-transparent sequence of a plurality of target clients, wherein the non-transparent sequence comprises an order that a plurality of backup data packets are stored on the plurality of target clients and the non-transparent sequence is unique and exclusively accessible to a global sequence manager; and

means for storing the data on the plurality of target clients according to the non-transparent sequence, wherein the source client and the plurality of target clients are organized in a grid computing system, wherein with client usage fees determined by a subscription manager and each physical distance between each target client is not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter, the minimum distance packet proximity parameter and maximum distance packet proximity parameter each specifying a distance value measured in a unit selected from miles and kilometers;

means for retrieving the plurality of backup data packets backed up on the plurality of target clients; and

means for assembling the retrieved plurality of backup data packets in the non-transparent sequence.

47. (New) The client of claim 17, wherein the client backup manager further maps the data to source client using a unique data identifier corresponding to the data, the unique data identifier identifying original, non-backup data and indicating a uniqueness of the data as compared to other data, and the client backup manager further creates a redundant backup data packet for each backup data packets prior to storing the backup data packets on the plurality of target clients and stores the redundant backup data packet on one of the plurality of target clients according to the non-transparent sequence.

48. (New) The system of claim 19, wherein the global sequence manager further creates a redundant backup data packet for each backup data packets prior to storing the backup data packets on the plurality of target clients and stores the redundant backup data packet on one of the plurality of target clients according to the non-transparent sequence.

49. (New) The method of claim 30, the method further comprising creating a redundant backup data packet for each backup data packets prior to storing the backup data packets on the plurality of target clients and storing the redundant backup data packet on one of the plurality of target clients according to the non-transparent sequence.

50. (New) The method of claim 36, the method further comprising:
mapping the data to source client using a unique data identifier corresponding to the data,
the unique data identifier identifying original, non-backup data and indicating a
uniqueness of the data as compared to other data; and
creating a redundant backup data packet for each backup data packets prior to storing the
backup data packets on the plurality of target clients and storing the redundant
backup data packet on one of the plurality of target clients according to the non-
transparent sequence.

51. (New) The method of claim 37, the method further comprising creating a redundant backup data packet for each backup data packets prior to storing the backup data packets on the plurality of target clients and storing the redundant backup data packet on one of the plurality of target clients according to the non-transparent sequence.

52. (New) The apparatus of claim 46, wherein the storing means further mapping the data to source client using a unique data identifier corresponding to the data, the unique data identifier identifying original, non-backup data and indicating a uniqueness of the data as compared to other data, and the storing means further creates a redundant backup data packet for each backup data packets prior to storing the backup data packets on the plurality of target clients and stores the redundant backup data packet on one of the plurality of target clients according to the non-transparent sequence.